

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1-10 are pending in the present application. Claims 1, 8 and 9 are amended and new claim 10 is added by the present amendment.

In the outstanding office action, the Title was objected to. In light of this objection, a new title is added which clearly indicates the invention to which the claims are directed. Accordingly, it is respectfully requested this objection be withdrawn.

Claims 1-3 and 5-9 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent number 5,406,519 to Ha in view of U.S. Patent Number 5,293,610 to Schwarz. This rejection is respectfully traversed because Ha and Schwarz do not teach the features of the pending claims and because the combination of Ha and Schwarz is deficient for lack of motivation to combine.

As taught in the present application, when access is requested to a memory containing secret data, input from a test terminal is prevented by cutting off input from the test terminal. As an advantage, it is possible to prevent information stored in the storage device from being illicitly read by someone using the test terminal (see the specification at page 4, lines 16-21).

Amended independent claim 1 is directed to a storage device "which is accessed by a host device through a host interface," support for which is found in the originally filed specification at least in FIGS. 1 and 2 and at page 8, line 31 to page 9, line 13. The storage device includes a cutting-off part which cuts off "the test signals input from the test terminal when the maintaining part maintains information indicating that the secret data is stored." The outstanding office action at page 3, lines 8-10 acknowledges that "Ha is silent in expressly disclosing...a cutting-off part cutting off the test signals input from a test terminal when the maintaining part maintains information indicating that the secret data is stored." Although the outstanding office action cites col. 2, lines 43-64 of Schwarz in reference to a cutting-off part, Schwarz also does not teach or suggest such a feature.

Rather, Schwarz at col. 5, lines 45-60 only discusses a software system which checks a "VALSEC byte" for a specifically defined value. Schwarz recites "if the second VALSEC byte has the second specifically defined value, the bootstrap program is aborted at block 68 thereby preventing the bulk erasure of EEPROM 6." Thus, Schwarz merely discusses a software comparison which branches to abort a bootstrap program if a particular byte has a specifically defined value, but does not teach or suggest "a cutting-off part cutting off the test signals input from the test terminal," as in pending independent claims 1, 8 and 9.

Accordingly, it is respectfully submitted independent claims 1, 8 and 9 and each of the claims depending therefrom patentably distinguish over Ha and Schwarz.

Moreover, it is respectfully submitted Ha and Schwarz would not be combined by one of ordinary skill in the art.

First, Ha discusses comparing an externally inputted value to respective stored security codes for addresses of a memory at col. 2, lines 16-25. In contrast, Schwarz discusses only checking one byte of an EEPROM to determine whether a security byte is set, and does not compare any externally inputted data at all. Because Ha provides security by comparing an externally inputted data with an internally stored data, one of ordinary skill in the art would not be motivated to combine the discussion in Schwarz of only checking an internally-set security byte.

Accordingly, it is respectfully submitted this rejection should be withdrawn.

Claim 4 was rejected under 35 U.S.C. § 103(a) as unpatentable over Ha, Schwarz and U.S. Patent Number 4,521,852 to Guttag. This rejection is respectfully traversed.

Claim 4 depends on claim 1, which as discussed is believed to patentably distinguish over Ha and Schwarz; further, the deficiency of the combination of Ha and Schwarz discussed above also applies to this rejection. In addition, Guttag only discusses a "data processing device fabricated on a single semiconductor substrate" having an external interface, security bits and addressing logic, but does not teach or suggest at least accessing memory by a host interface and a test terminal inputting test signals, as in the pending claims. Accordingly, it is respectfully submitted claim 4 also patentably distinguishes over Ha, Schwarz and Guttag.

In addition, new claim 10 is added to set forth the invention in a varying scope. New claim 10 includes similar features as independent claim 1, and is believed to be allowable for similar reasons as claim 1. It is believed no new matter is added.

Also, the specification and FIGS. 3 and 10A are amended only to correct minor informalities. It is believed no new matter is added.

Consequently, in light of the above discussion and in view of the present amendment, this application is believed to be in condition for allowance, and an early and favorable action to that effect is respectfully requested.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: April 13, 2004

By: Ryan Rafferty
Ryan Rafferty
Registration No. 55,556

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501